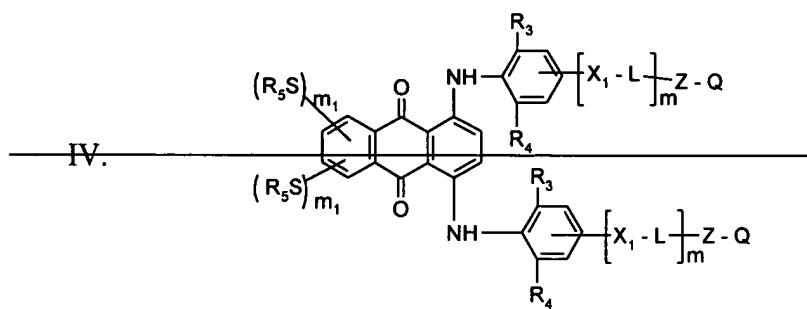
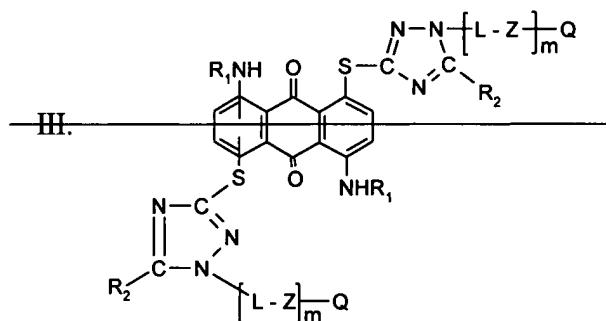
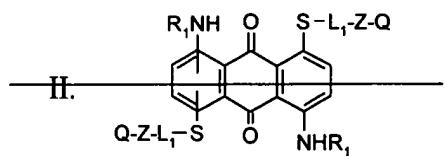
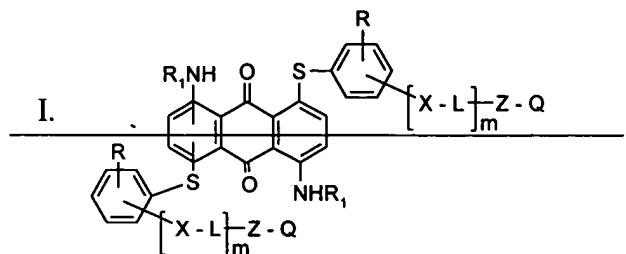
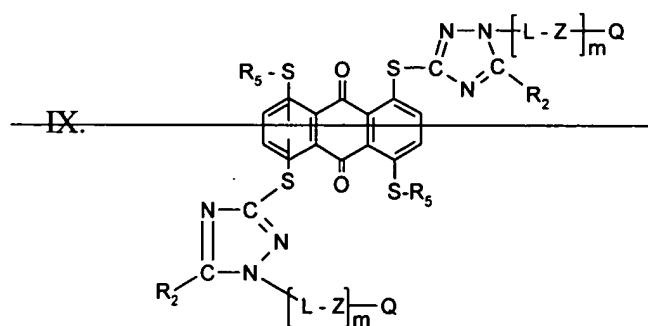
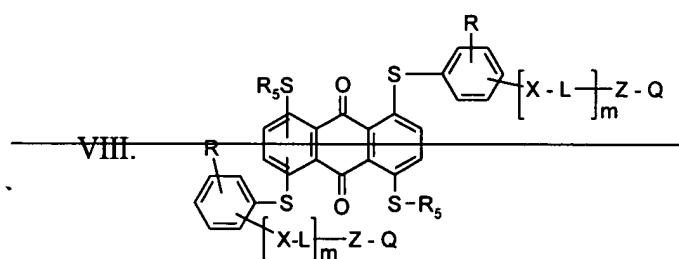
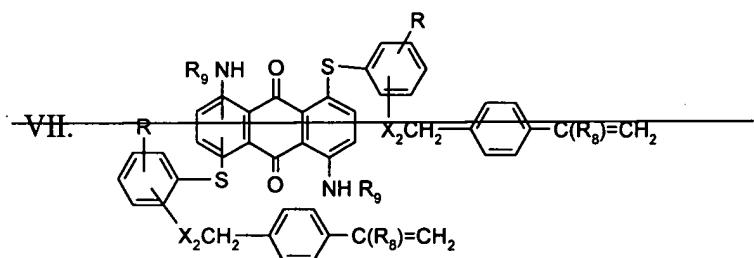
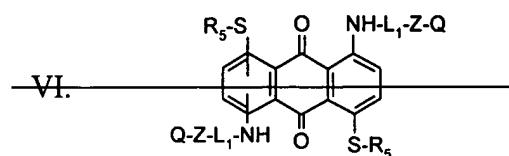
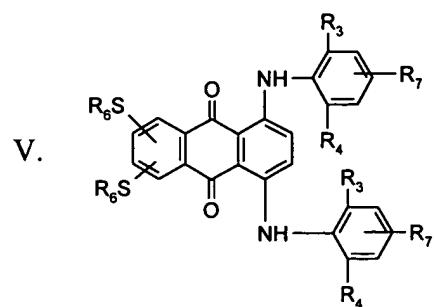
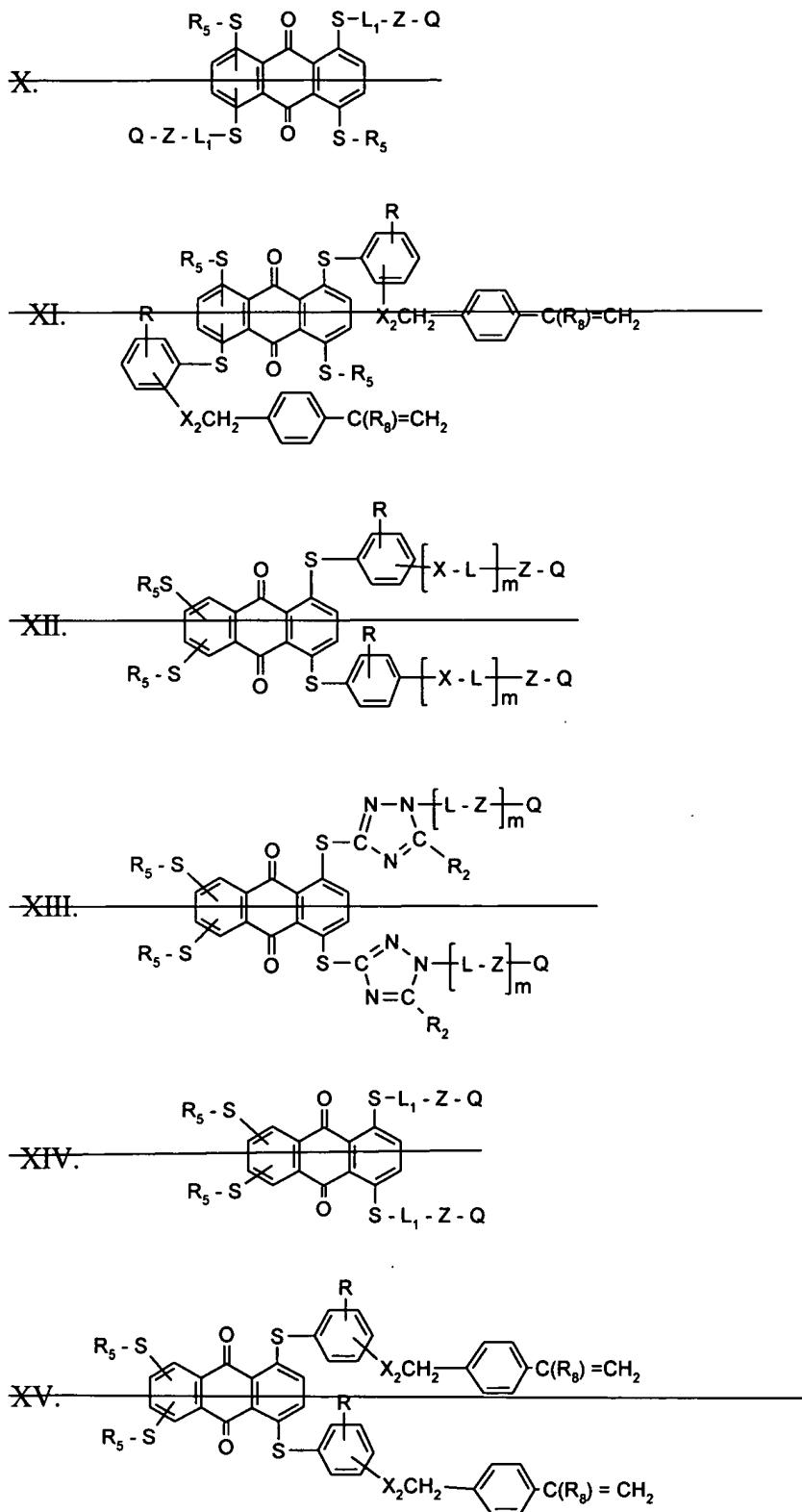


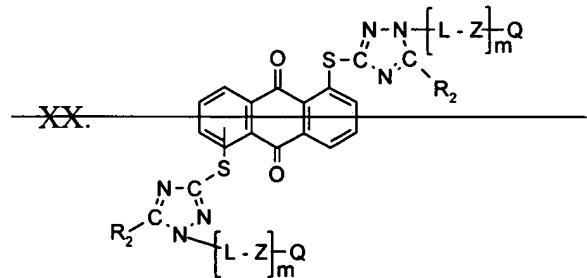
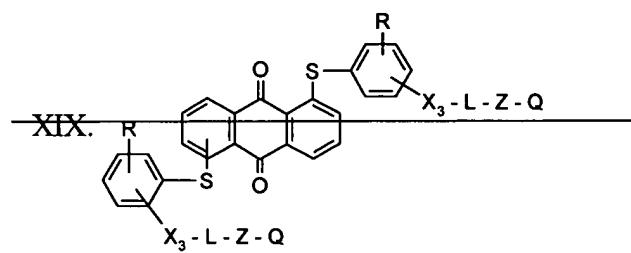
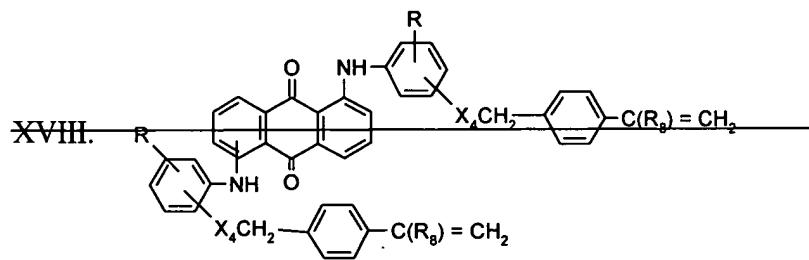
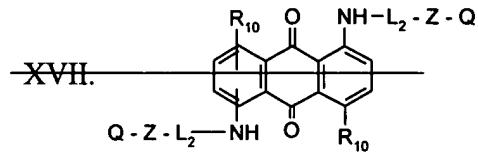
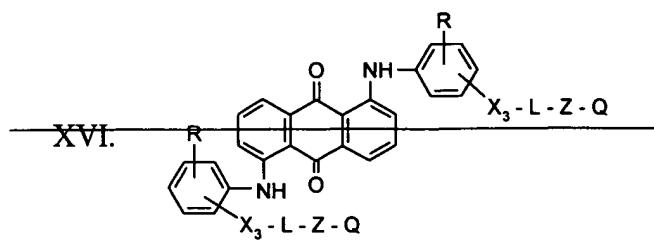
AMENDMENT

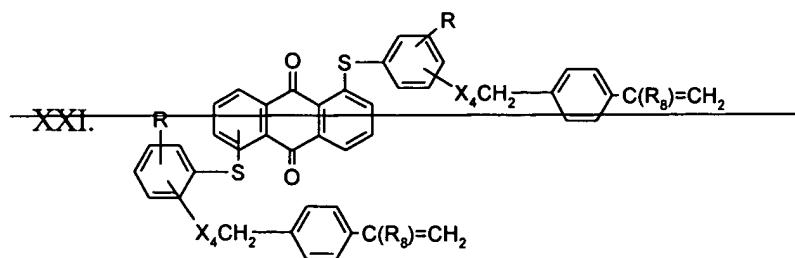
1. (Currently Amended) Anthraquinone dye compounds having the formulae: formula V.:











wherein:

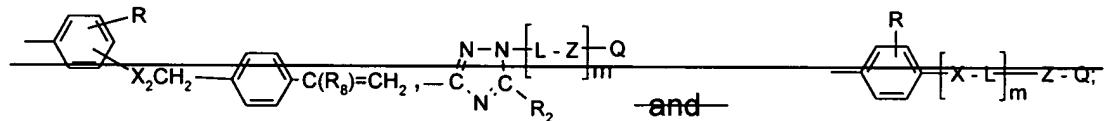
R is selected from hydrogen or 1-3 groups selected from C₁ - C₆-alkyl, C₁ - C₆-alkoxy and halogen;

R₁ is selected from C₁ - C₆-alkyl, substituted C₁ - C₆-alkyl, C₃ - C₈-alkenyl, C₃ - C₈-cycloalkyl, aryl and L₄-Z-Q;

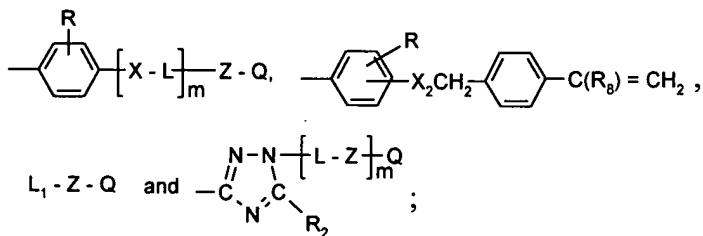
R₂ = selected from hydrogen is hydrogen, C₁ - C₆-alkyl, substituted C₁ - C₆-alkyl, C₃ - C₈-cycloalkyl and aryl or aryl;

R₃ and R₄ are independently selected from C₁ - C₆-alkyl and or bromine;

R₅ is selected from C₁ - C₆-alkyl, substituted C₁ - C₆-alkyl, C₃ - C₈-cycloalkyl, aryl, heteroaryl, L₄-Z-Q,



R₆ is selected from



R₇ is selected from hydrogen, substituted or unsubstituted C₁ - C₆-alkyl, C₁ - C₆-alkoxy, halogen, hydroxy, substituted or unsubstituted C₁ - C₆-alkylthio, sulfamoyl and or substituted sulfamoyl;

R₈ is selected from hydrogen and hydrogen or C₁ - C₆-alkyl;

~~R₉ is selected from the groups represented by R₄ and L-Z-Q;~~

~~R₁₀ is selected from hydrogen and halogen;~~

X is a covalent bond or a divalent linking group selected from -O-, -S-, -SO₂-, -CO₂-, -CON(Y)- and -SO₂N(Y)-, wherein Y is selected from hydrogen, C₁-C₆-alkyl, substituted C₁-C₆-alkyl, C₃-C₈-cycloalkyl, C₃-C₈-alkenyl, aryl and aryl or -L-Z-Q;

~~X₁ is selected from O, S, SO₂ and SO₂N(Y);~~

X₂ is selected from -CO₂- and -SO₂N(Y₁), wherein Y₁ is a group selected from hydrogen, C₁-C₆-alkyl, substituted C₁-C₆-alkyl, C₃-C₈-alkenyl, C₃-C₈-cycloalkyl, aryl, heteroaryl and or -CH₂-p-C₆H₄-C(R₈)=CH₂;

~~X₃ is selected from CO₂, SO₂N(Y);~~

~~X₄ is selected from CO₂, O and SO₂N(Y₁);~~

L is a divalent linking group selected from C₁-C₈-alkylene, C₁-C₆-alkylene-arylene, arylene, C₁-C₆-alkylene-arylene -C₁-C₆-alkylene, C₃-C₈-cycloalkylene, C₁-C₆-alkylene -C₃-C₈-cycloalkylene -C₁-C₆-alkylene, C₁-C₆-alkylene - Z₁-arylene -Z₁-C₁-C₆-alkylene and or C₂-C₆-alkylene-[Z₁-C₂-C₆-alkylene-]_n- wherein Z₁ is selected from -O-, -S- and or -SO₂- and n is 1-3;

L₁ is a divalent linking group selected from C₂-C₆-alkylene, C₁-C₆-alkylene-C₃-C₈-cycloalkylene-C₁-C₆-alkylene, C₁-C₆-alkylene-arylene, C₃-C₈-cycloalkylene, and or C₂-C₆-alkylene-[Z₁-C₂-C₆-alkylene-]_n-, wherein Z₁ is -O-, -S- or -SO₂- and n is 1-3;

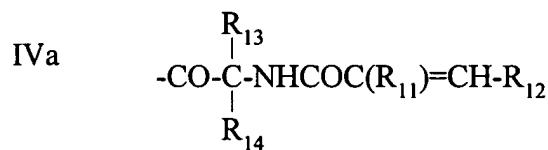
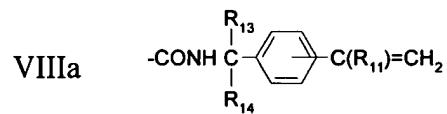
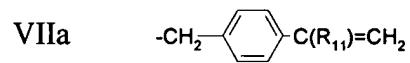
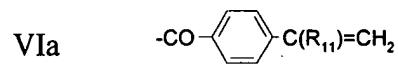
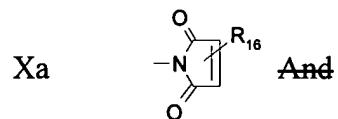
~~L₂ is selected from C₂-C₆-alkylene, C₁-C₆-alkylene-arylene-C₁-C₆-alkylene and C₁-C₆-alkylene-C₃-C₈-cycloalkylene-C₁-C₆-alkylene;~~

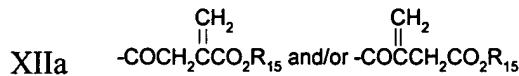
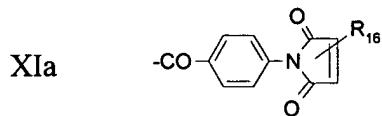
Z is a divalent group selected from -O-, -S-, -NH-, -N(C₁-C₆-alkyl)-, -N(C₃-C₈ alkenyl)-, -N(C₃-C₈ cycloalkyl)-, -N(aryl)-, -N(SO₂C₁-C₆-alkyl) and or -N(SO₂ aryl)-, provided that when Q is a photopolymerizable optionally substituted maleimide radical, Z represents a covalent bond;

Q is an ethylenically-unsaturated, photosensitive polymerizable group; and

~~m and m₁ each is 0 or 1~~ m is 0 or 1.

2. (Currently amended) Anthraquinone compounds according to Claim 1 wherein the ethylenically-unsaturated, photosensitive copolymerizable groups represented by Q are selected from the following organic radicals:

Ia $-\text{COC}(\text{R}_{11})=\text{CH}-\text{R}_{12}$ IIa $-\text{CONH-COC}(\text{R}_{11})=\text{CH}-\text{R}_{12}$ IIIa $-\text{CONH-C}_1-\text{C}_6\text{-alkylene OCOC}(\text{R}_{11})-\text{CH=CH-R}_{12}$ Va $-\text{COCH=CH-CO}_2\text{R}_{15}$ IXa $-\text{SO}_2\text{C}(\text{R}_{11})=\text{CH}_2$ 



wherein:

R₁₁ is selected from hydrogen and hydrogen or C₁-C₆-alkyl;

R₁₂ is selected from hydrogen; C₁-C₆-alkyl; phenyl and or phenyl substituted with one or more groups selected from C₁-C₆-alkyl, C₁-C₆-alkoxy, -N(C₁-C₆-alkyl), nitro, cyano, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkanoyloxy and halogen; 1- and 2-naphthyl 1- or 2-naphthyl which may be substituted with C₁-C₆-alkyl or C₁-C₆-alkoxy; 2- and 3-thienyl 2- or 3-thienyl which may be substituted with C₁-C₆-alkyl or halogen; or 2- or 3-furyl which may be substituted with C₁-C₆-alkyl;

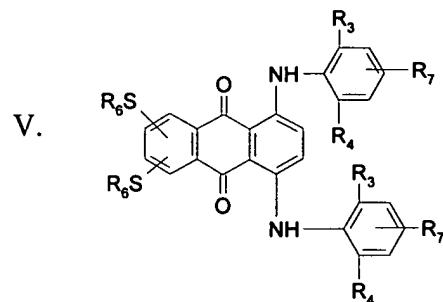
R₁₃ and R₁₄ are selected from hydrogen, C₁-C₆-alkyl, substituted C₁-C₆-alkyl, aryl or may be combined to represent a -[CH₂-]3-5- radical;

R₁₅ is selected from hydrogen, C₁-C₆-alkyl, substituted C₁-C₆-alkyl, C₃-C₈-alkenyl, C₃-C₈-cycloalkyl and aryl or aryl;

R₁₆ is selected from hydrogen, C₁ - C₆-alkyl and aryl or aryl.

Claims 3 – 6 (Canceled)

7. (Original) Anthraquinone compounds according to Claim 2 having the formula:



wherein Z is -O-.

Claims 8 – 18 (Canceled)

19. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical Ia.

20. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical Ia wherein R₁₁ is hydrogen or methyl and R₁₂ is hydrogen.

21. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIa.

22. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIa wherein R₁₁ is hydrogen.

23. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIa.

24. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIa wherein R₁₁ is hydrogen or methyl and R₁₃ and R₁₄ are methyl.

Claims 25 – 46 (Canceled)

47. (Original) A coating composition comprising (i) one or more polymerizable vinyl compounds, (ii) one or more of the dye compounds of Claim 1, and (iii) a photoinitiator.

48. (Currently amended) A coating composition ~~according to Claim 47~~ comprising (i) one or more polymerizable vinyl compounds, (ii) one or more of the dye compounds of Claim 2 present in a concentration of about 0.05 to 15 weight percent based on the weight of component (i), and (iii) a photoinitiator present in a concentration of about 1 to 15 weight percent based on the weight of the polymerizable vinyl compound(s) present in the coating composition.

49. (Original) A coating composition according to Claim 48 wherein the polymerizable vinyl compounds comprise a solution of a polymeric, polymerizable vinyl compound selected from acrylated and methacrylated polyesters, acrylated and methacrylated polyethers, acrylated and methacrylated epoxy polymers, acrylated or methacrylated urethanes, and mixtures thereof, in a diluent selected from monomeric acrylate and methacrylate esters.

50. (Currently amended) A polymeric coating composition comprising a polymer of one or more acrylic acid esters, one or more methacrylic acid esters ~~and/or other or~~ other copolymerizable vinyl compounds, having copolymerized therein one or more of the dye compounds defined in Claim 1.

51. (Currently amended) A polymeric coating composition ~~according to Claim 50~~ comprising a coating of an acrylic polymer of one or more acrylic acid esters, one or more methacrylic acid esters or a mixture thereof having copolymerized therein one or more of the dye compounds defined in Claim 2.

52. (Currently amended) A polymeric coating composition ~~according to Claim 50~~ comprising a coating of an unsaturated polyester containing one or more maleate/fumarate residues; one or more monomers which contain one or more vinyl

ether groups, one or more vinyl ester groups, or a combination thereof, and, optionally, one or more acrylic or methacrylic acid esters; or a mixture thereof having copolymerized therein one or more of the dye compounds defined in Claim 2.

53. (Currently amended) A polymeric coating according to Claim 51 containing from about 0.05 to 15.0 weight percent of the residue of one or more of the dye compounds of ~~Claim 2~~ based on the weight of the coating.